

Appendix O

CONGESTION MANAGEMENT SYSTEM

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2001 RTP Technical Appendix

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Congestion Management System

Background

The United States Department of Transportation's Transportation Equity Act for the 21st Century (TEA-21) requires development, establishment and implementation of a Congestion Management System (CMS) which is fully integrated into the regional planning process. In compliance with the Sections 500.109 and 450.320 of the Metropolitan Planning Regulations [23 U.S.C. 134 and 49 U.S.C. 5303-5005], SCAG has made the CMS an integral part of the regional transportation planning process, including the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP).

In the SCAG region, the Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties are contained within the transportation management area (TMA). The County Transportation Commission in each county also functions as the Congestion Management Agency (CMA) under California requirements. Section 500.103 of the Federal Management System defines TMA as follows:

“Transportation management area (TMA) means an urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the Metropolitan Planning Organization (MPO) or affected local officials, and officially designated by the Administrators of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The TMA designation applies to the entire metropolitan planning area(s).”

To meet the federal CMS requirements, SCAG and the county CMAs have come together to develop a CMS process for the region. Under state law, the Congestion Management Programs (CMPs) are prepared and maintained by the respective CMAs:

- ## The Los Angeles County Metropolitan Transportation Authority (LACMTA)
- ## The Orange County Transportation Authority (OCTA)
- ## The Riverside County Transportation Commission (RCTC)
- ## The San Bernardino Associated Governments (SANBAG)
- ## The Ventura County Transportation Commission (VCTC)

With the exception of small portions of Riverside and San Bernardino counties, all counties contained within the TMA are designated as ozone non-attainment areas. In addition, the entire South Coast Air Basin (SCAB) is designated as a carbon monoxide non-attainment area. SCAB covers the urbanized portions of Los Angeles, Orange, Riverside, and San Bernardino counties.

Federal funds may not be programmed in carbon monoxide and ozone non-attainment of the Transportation Management Areas (TMAs) for any project resulting in significant increase in single occupant vehicle (SOV) capacity unless that project is based on a CMS. In the SCAG region, the federally approved RTP functions for this purpose.

Regional Congestion Management Elements

In the SCAG region, the CMS process is comprised of the combined activities of following Regional Congestion Management Elements:

- ## The Regional Transportation Plan (RTP)
- ## The counties' Congestion Management Programs (CMPs)
- ## The Regional Transportation Improvement Program (RTIP)

The functionality of each element is described in the following sections.

I. Regional Transportation Plan (RTP)

SCAG's Regional Transportation Plan (RTP) establishes overall long term mobility policies for movement of people and goods, including congestion relief strategies for all regionally significant facilities and activities (projects and programs). The RTP identifies:

- ## Interregional issues
- ## Intra-regional (inter-county) issues
- ## Priorities for improvements to regionally significant facilities or activities
- ## Performance measures for evaluating effectiveness of various multi-modal strategies

Additionally, there are other CMS related process and program incorporated into the RTP, and are as follows:

Regionally Significant Transportation Investment Study

Within the context of regional transportation planning, the Regionally Significant Transportation Investment Study (RSTIS) process provides a tool that allows a multi-modal analysis. RSTIS is the SCAG established process. In the federally designated non-attainment and maintenance areas, it is required to ensure other alternatives than single occupancy vehicle (SOV) are considered in improving the mobility and air quality of a corridor or a sub-area.

Intelligent Transportation System

SCAG's RTP contains the Intelligent Transportation System (ITS) program. ITS is also an important element of the SCAG congestion reduction strategies. There are Transportation Management Centers (TMCs) using advanced integrated ITS technologies in all four Caltrans Districts (7, 8, 11, and 12) serving the entire region. Through the Traveler Advisory News Network (TANN), most of the current traffic detection, California Highway

Patrol Incident data, and a portion of the changeable message signs are available to travelers on the internet, handheld computers, pagers, and other portable communications devices.

At the present time, over 750 centerline miles of freeway system in the urbanized portion of the SCAG region have full traffic detection capabilities, and coverage with over 300 video cameras. Additional detection devices are being added on portions of Interstate (I-15), Route 71, Route 110, and upon completion of the Route 30/I-210 extension. Additionally, the local ITS infrastructure is supported by over 14,000 loops and other detection devices, hundreds of video cameras, and a growing number of the changeable message signs at critical locations such as major arterial and special events centers to provide motorist information.

II. Congestion Management Program (CMP)

Due to the magnitude of congestion and degree of urbanization differ among the counties, each CMP differs in form and local procedure. By State statute, all CMPs perform the same functions outlined below which are consistent with the federal CMS requirements.

- ## Highway Performance - each CMA monitors the performance of an identified highway system. This allows each county to track how this system, and its individual components, are performing against established standards, and how performance changes over time.
- ## Multi-Modal Performance - in addition to highway performance, each CMP contains an element to evaluate the performance of other transportation modes including transit.
- ## Transportation Demand Management (TDM) - each CMP contains a TDM component geared at reducing travel demand and promoting alternative transportation methods.
- ## Land Use Programs and Analysis - each CMP incorporates a program for analyzing the impacts of local land use decisions on the regional transportation system.
- ## Capital Improvement Program (CIP) - using data and performance measures developed through the activities identified above, each CMP develops a CIP. This becomes the first step in developing the County TIP. Under State law, projects funded through the Regional Transportation Improvement Program (RTIP) must first be contained in the county CMP.
- ## Deficiency Planning - despite all these efforts, unacceptable levels of congestion can develop. When this occurs, the CMP contains provisions for “deficiency plans” to address the problems. Deficiency plans can be developed for specific problem areas or on a system-wide basis. Projects implemented through the deficiency plans must, by statute, have both mobility and air quality benefits. In many cases, the deficiency plans capture the benefits of the transportation projects occur outside the SCAG RTIP such as non-federally funded / non-regionally significant projects.

Information on the CMP activities, and resulting data, is updated on a biennial basis by each CMA and supplied to SCAG and the respective air quality management district.

III. Regional Transportation Improvement Program (RTIP)

All federally funded congestion relief strategies (projects and programs) are programmed into the Regional Transportation Improvement Program (RTIP) in the SCAG region. Under state law, the CMP projects must be incorporated into the RTIP in order to receive federal and state funds. Under federal law, the RTIP must be updated every two years for funding.

In non-attainment and maintenance areas, the RTIP projects as a whole, including congestion relief projects, must be analyzed for the Transportation Conformity requirements. In project-level analysis, the projects requiring federal action (funding or approval) are subject to environmental impact study (EIS) through the National Environmental Policy Act (NEPA). This is an evaluation and analysis of the alternatives. The selected alternative will be incorporated into the RTIP for implementation.

Note that the CMP documents list additional projects which are 100% locally funded and not regionally significant, such as the transportation demand management (TDM) and bike lane project.

Regional Integration

The CMPs' efforts have been brought together on a region-wide basis and integrated into the SCAG regional planning process. SCAG's Regional Council and the Regional Transportation Agencies Coalition ensure consistency between the county CMPs and SCAG's RTP and RTIP.

The Regional Consistency and Compatibility Criteria for CMPs, developed by SCAG and CMAs in early 1995, ensure consistency and compatibility between the regional transportation planning process and the county congestion management process, and are as follows:

- ## CMP consistency with the current RTP
- ## Interregional (inter-county) coordination between the CMPs goals and objectives
- ## Consistency between county-wide model / database and SCAG's model / database
- ## All regionally significant CMP projects are to be modeled and incorporated into SCAG's Regional Transportation Modeling System (network)

Compliance with the above criteria is essential, particularly for those CMP projects to be programmed into the SCAG RTIP.

The Inter-county Congestion Management Group (established in late 1994) facilitates coordination and communication between the CMAs, SCAG, and state and federal transportation agencies. The Group membership is comprised of the representatives of LACMTA, OCTA, RCTC, SANBAG, VCTC, and SCAG. Other agencies, Caltrans, the

Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) are invited to attend meetings, as needed, to discuss related issues. SCAG convenes the meetings, as needed.

CMPs in the SCAG Region

County	Congestion Management Agency (CMA)	Congestion Management Program (CMP)
Los Angeles	Los Angeles County Metropolitan Transportation Authority (LACMTA)	1999 CMP for Los Angeles County
Orange	Orange County Transportation Authority (OCTA)	1999 Orange County CMP
Riverside	Riverside County Transportation Commission (RCTC)	Riverside County CMP December 1999
San Bernardino	San Bernardino Associated Governments (SANBAG)	CMP for San Bernardino County 1999
Ventura	Ventura County Transportation Commission (VCTC)	1999 Ventura County CMP

Triennial Reporting and CMS Certification

Compliance with the Federal CMS requirements is addressed during metropolitan planning process certification. Every three years as part of the Triennial Planning Certification, SCAG prepares a CMS Report. The Report documents the congestion relief strategies and activities in progress in the Transportation Management Area (TMA) of the SCAG region.

Traffic Monitoring System

Outside the CMS requirements, the federal regulations require establishment of a traffic monitoring system (TMS). It is the responsibility of the State, the California Department of Transportation (Caltrans) - working with the metropolitan planning organizations (MPOs), and local agencies - to develop a TMS.

SCAG, the CMAs and Caltrans work together in improving the reporting accuracy and timely monitoring of highway data collection and analysis. This is being accomplished through the Highway Performance Monitoring System (HPMS) program. The HPMS program is a joint effort of the Federal, State, MPO, and local governmental agencies.

SCAG coordinates submittal of the HPMS data update with the local jurisdictions. Annually through the HPMS program, SCAG submits over five thousand sheets for updating data to cities and counties in Southern California. After reviewing the updated sheets for accuracy and

completion, SCAG submits them to Caltrans. In compliance with the federal regulations, Caltrans uses the new information to update its HPMS Annual Report. Every year, the Federal Highway Administration (FHWA) uses the states submitted Annual Reports for reporting to Congress.

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